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Activity 2 - Table Structure and Validation Practice Questions

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The Vehicle Rental Company

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Task Scenario

- You have been asked to create a database for the East Berkshire Vehicle Rental Company
- Currently all records are stored on a spreadsheet
- The Company would like to be able to store information about their Rentals, Customers and Vehicles.
- The Company would like to be able to report on how their cars are Hired.

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Task Scenario

The database will record information about:

Customers and Customer Types.

Vehicles.

Rental Data.

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Task Scenario

- Cars can be Petrol, Hybrid or Electric.
- The company wants the flexibility to add new cars and customers at a later date.
- Customers can on a Platinum, Gold or Standard discount model.
- Each discount allows a different percent discount.
- If a vehicle rental does not have a return date, that means the customer still has the vehicle out for hire.
- Hire costs are for each full day of hire.

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The Data

Vehicle ID	Vehicle Type	Vehicle Make	Hire Cost	Customer ID	Customer Name	Customer Postcode	Discount ID	Discount Type	Discount	Date Hired	Date Returned
1	Petrol	Ford	£75	1	Smith	RG47BP	1	Platinum	25%	20/09/2020	24/09/2020

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Table Structure - tblVehicle

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Table Structure - tblVehicle

- You will also need information specific to each Vehicle:
- VehicleID as Primary Key.
- VehicleType as Text.
- VehicleMake as Text.
- HireCost as number.

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Table Structure - tblVehicle

Field names and datatypes are given on the next slide

Do not create an AutoNumbered Primary Key at this stage as you are given Primary Key values

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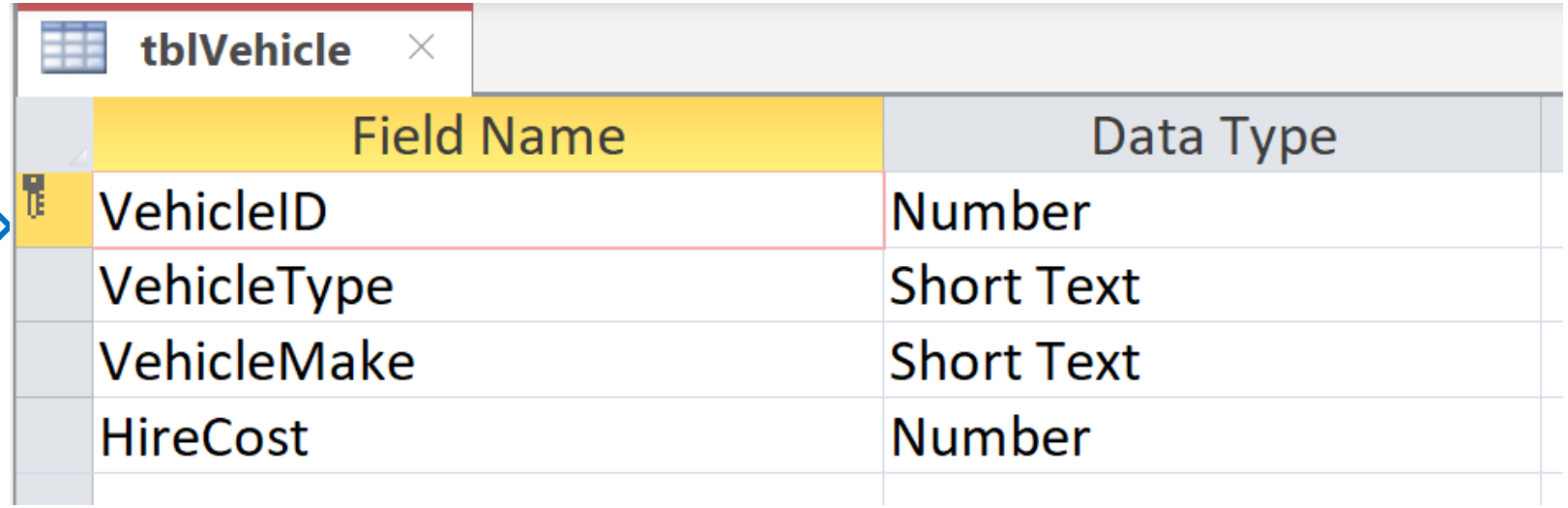
Table Structure - tblVehicle

Primary Key



tblVehicle

Field Name	Data Type
VehicleID	Number
VehicleType	Short Text
VehicleMake	Short Text
HireCost	Number

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Table Validation

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Validation Information

- Lots of validation has been included.
- You will not have anywhere near this number of these in your exam.
- The idea is to give you lots of opportunities to practice.
- In your exam you will need to provide validation evidence on 6 columns.
- Make sure you do these and no others – you won't have time!

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tblVehicle

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A Vehicle record will not save if the Vehicle Make is missing – presence check

- Use an ‘Is Not Null’ validation check
- Put it on the VehicleMake column
- In the Validation Rule property field
- You can then add a suitable error message in the Validation text property field

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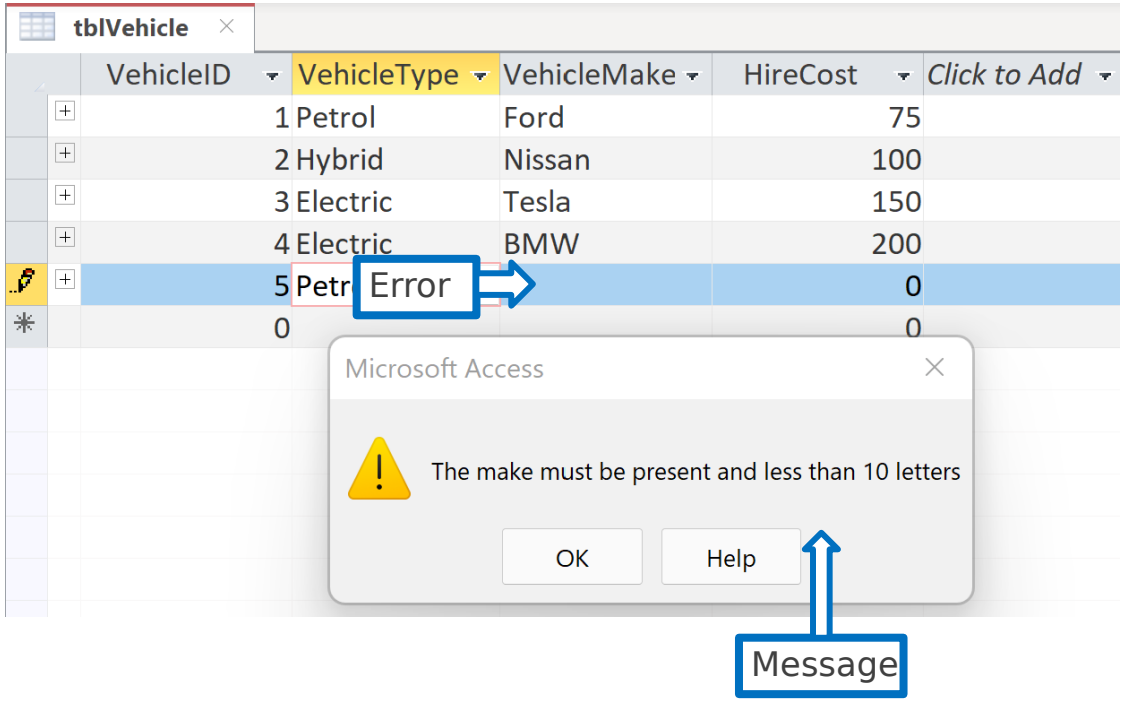
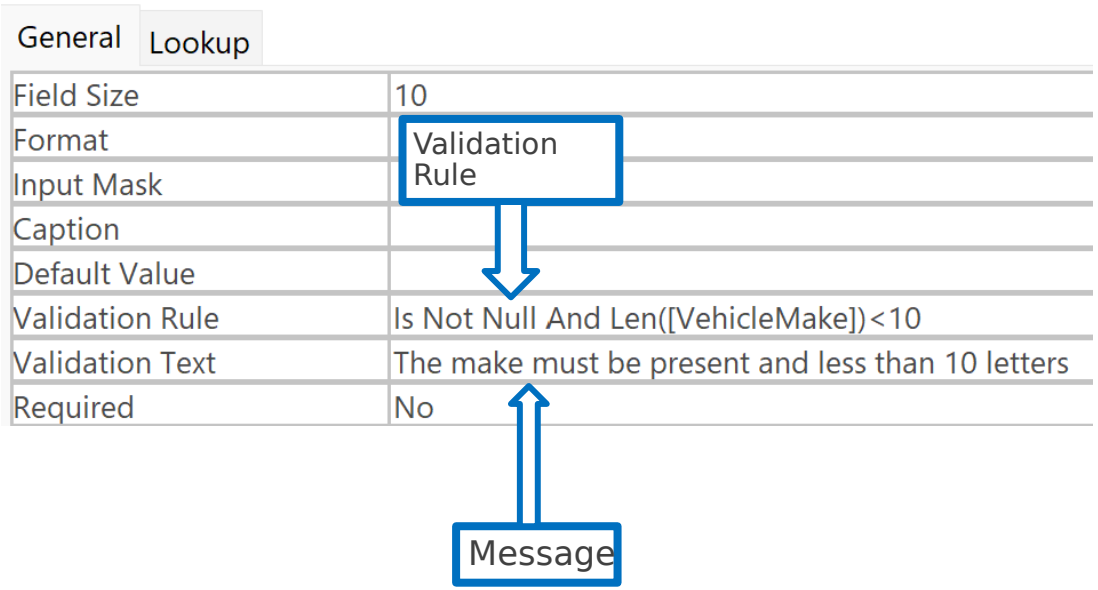
A Vehicle record will not save if the Vehicle Make is missing – presence check

ACCESS SCREENSHOT



VALIDATION CODE



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A Vehicle record will not save if the Vehicle Type is missing – presence check

- Use an ‘Is Not Null’ validation check
- Put it on the VehicleType column
- In the Validation Rule property field
- You can then add a suitable error message in the Validation text property field

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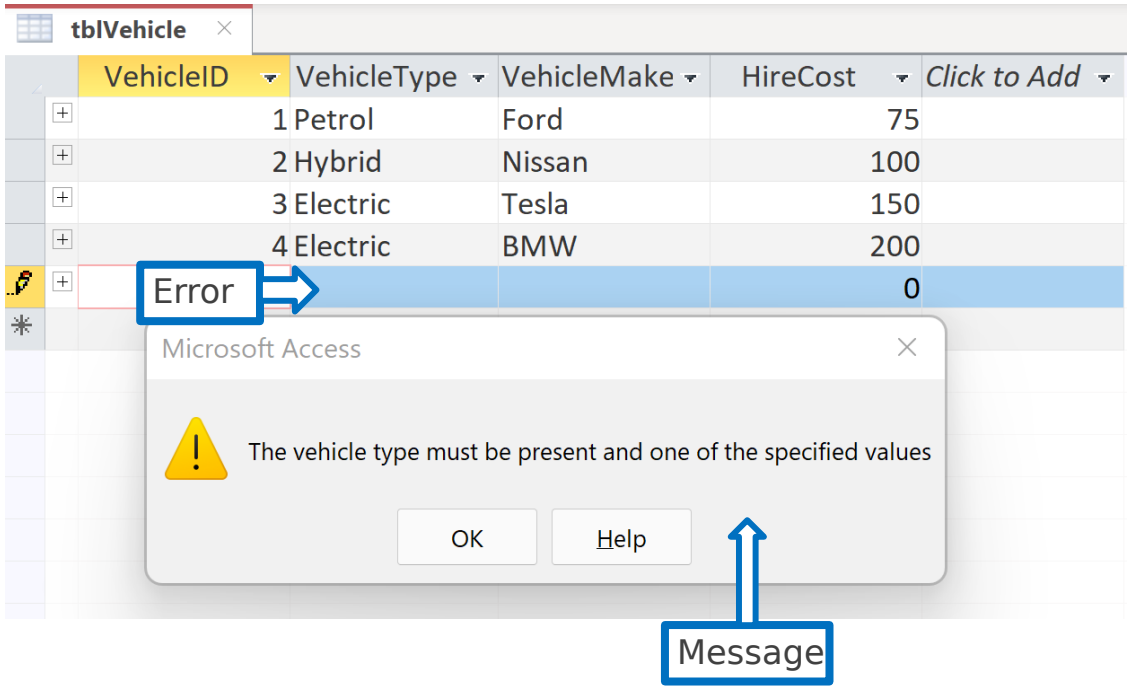
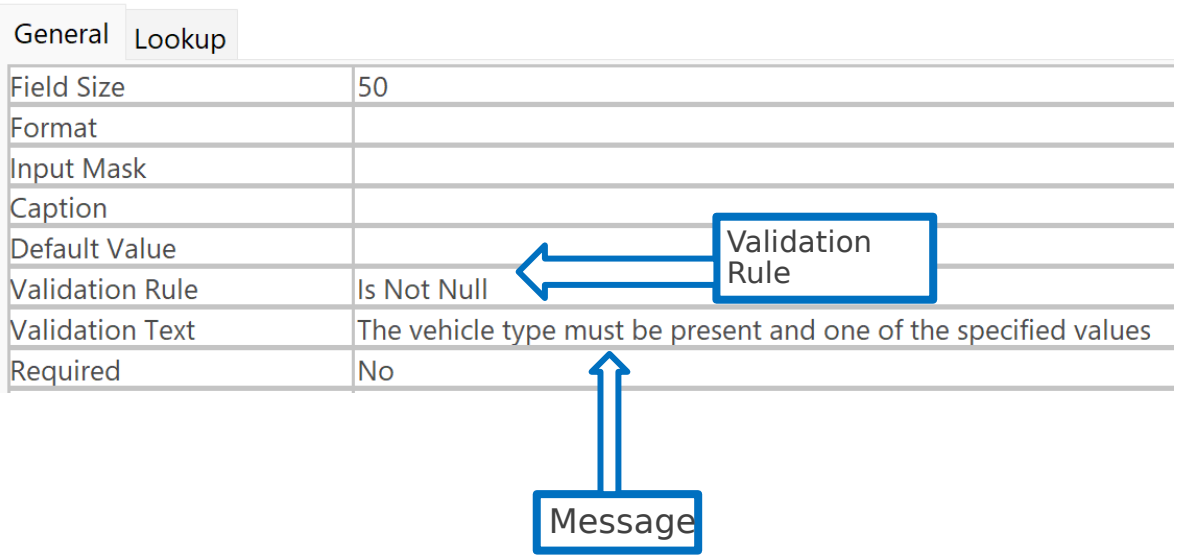
A Vehicle record will not save if the Vehicle Type is missing – presence check

ACCESS SCREENSHOT



VALIDATION CODE



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Glossary of Terms

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Glossary – Relational Database 1

Key Term	Definition
Attribute	Another name for a Column (or Field) in a Table in a Database.
Cardinality	A measure of how unique values within a column are. A Primary Key column would have High Cardinality, an ‘IsStudent’ column would have Low Cardinality.
Domain	
Entity	
Relation	
Relational Database	
Tuple	

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